Claims Listing:

Kindly replace all prior listings of claims in the referenced application with the below listing of claims.

1. (Currently Amended) A closed loop method of controlling the power output of a specified switched reluctance generator operating as a part of an electrical power system, where said generator is operating in single pulse mode, by controlling the excitation parameters of turn-on and turn-off angle taking into account the input speed to the generator and the power requirement from the electrical power system , comprising the steps of:

supplying mechanical input to said specified switched reluctance generator[[,]] ;

receiving a power requirement indication from said electrical power system[[,]] ;

~~determining~~ calculating an optimal efficiency [[a]] turn-off angle for said switched reluctance generator according to the optimum efficiency of power production for said specified switched reluctance generator as a result of an analytical curve fit function [[of]] taking into account said power requirement and mechanical input speed and performance parameters of said specified switched reluctance generator , and;

thereafter, determining [[a]] an optimal efficiency turn-on angle for said switched reluctance generator based on supplying electrical power to meet a power requirement of said power system in accord with said power requirement indication and said previously calculated optimal turn-off angle.

2. (Currently Amended) A method as in claim 1, wherein:
said mechanical input is provided by an [[IC]] internal combustion engine.

3. (Original) A method as in claim 1, wherein:

said function for determining said specified switched reluctance generator turn-off angle θ_{off} comprises:

$$\theta_{off} = k_1 \omega p + k_2 \omega + k_3 p + k_4$$

where ω is rotor speed reflecting mechanical input power, "p" is the output power reflecting said power requirement indication, and $k_{1\text{-}4}$ are curve fit parameters based on a least squares fit to data representing the collection of optimal turn-off angles for said specified switched reluctance generator.

4. (Original) A method according to claim 3, wherein:
said curve fit parameters are based on the optimized data of four operating points representing all combinations of low speed, high speed, low power, and high power for said specified switched reluctance generator.

5. (Currently Amended) A method as in claim 4, wherein:
said mechanical input is provided by an [[IC]] <u>internal combustion</u> engine.

6. (Currently Amended) A closed loop method of controlling the voltage output at a relatively constant level of a specified switched reluctance generator operating as a part of an electrical power system, where said generator is operating in single pulse mode, by controlling the excitation parameters of turn-on and turn-off angle, comprising the steps of:

supplying mechanical input to said switched reluctance generator,
receiving a voltage requirement indication from said electrical power system,
determining a turn-off angle for said switched reluctance generator according to the optimum efficiency of power production for said specified switched reluctance generator as a <u>result of an analytical curve fit</u> function [[of]] <u>taking into account</u> said voltage requirement and mechanical input speed <u>and optimal efficiency operating parameters of said specified switched reluctance generator, and, thereafter;</u>
determining a turn-on angle for said switched reluctance generator based on supplying electrical power to meet a voltage requirement of said power system in

accord with said voltage requirement indication <u>and said previously determined optimal efficiency turn-off angle</u>.

7. (Currently Amended) A method as in claim 6, wherein:
said mechanical input is provided by an [[IC]] <u>internal combustion</u> engine.

8. (Currently Amended) A closed loop method of controlling the rate of change of the power output setpoint of a specified switched reluctance generator operating as a part of an electrical power system, where said generator is operating in single pulse mode, by controlling the excitation parameters of turn-on and turn-off angle, comprising the steps of:

supplying mechanical input to said switched reluctance generator,
receiving a power requirement indication from said electrical power system,
determining a turn-off angle for said switched reluctance generator according to the optimum efficiency of power production for said specified switched reluctance generator as a function of said power requirement and mechanical input speed, <u>and, thereafter,</u>
determining a turn-on angle for said switched reluctance generator based on supplying electrical power to meet a power requirement of said power system in accord with said power requirement indication, <u>and</u>
controlling [[a]] the rate at which said power system responds to meet said power requirement to preserve said mechanical input speed above a predetermined threshold speed.

9. (Currently Amended) A method as in claim 8, wherein:
said mechanical input is provided by an [[IC]] <u>internal combustion</u> engine.